

FILE 'HOME' ENTERED AT 15:58:33 ON 22 APR 2010

=> FILE BIOSIS
COST IN U.S. DOLLARS
SINCE FILE
ENTRY
TOTAL
SESSION
FULL ESTIMATED COST
0.22
0.22

FILE 'BIOSIS' ENTERED AT 15:58:52 ON 22 APR 2010
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FILE COVERS 1926 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 21 April 2010 (20100421/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

=> S DELTA ADJ5 ADJ ELONGASE
144030 DELTA
0 ADJ5
613 ADJ
506 ELONGASE
L1 0 DELTA ADJ5 ADJ ELONGASE
(DELTA(W)ADJ5(W)ADJ(W)ELONGASE)

=> DELTA ADJ 5 ADJ ELONGASE
DELTA IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> S DELTA ADJ 5 ADJ3 ELONGASE
144030 DELTA
613 ADJ
3068124 5
0 ADJ3
506 ELONGASE
L2 0 DELTA ADJ 5 ADJ3 ELONGASE
(DELTA(W)ADJ(W)5(W)ADJ3(W)ELONGASE)

=> S DELTA5 AND ELONGASE
733 DELTA5
506 ELONGASE
L3 27 DELTA5 AND ELONGASE

=> D 1-27

L3 ANSWER 1 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:429485 BIOSIS
DN PREV200900430588
TI Improvement of arachidonic acid and eicosapentaenoic acid production by increasing the copy number of the genes encoding fatty acid desaturase and elongase into *Pichia pastoris*.
AU Li, Yun-Tao; Li, Mao-Teng; Fu, Chu-Hua; Zhou, Peng-Peng; Liu, Jian-Min; Yu, Long-Jiang [Reprint Author]
CS Huazhong Univ Sci and Technol, Inst Resource Biol and Biotechnol, Coll Life Sci and Technol, Wuhan 430074, Peoples R China
yulongjiang@mail.hust.edu.cn

SO Biotechnology Letters, (JUL 2009) Vol. 31, No. 7, pp. 1011-1017.
CODEN: BILED3. ISSN: 0141-5492.

DT Article
LA English

OS GenBank-AY746355; EMBL-AY746355; DDJB-AY746355

ED Entered STN: 22 Jul 2009
Last Updated on STN: 25 Nov 2009

L3 ANSWER 2 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:314317 BIOSIS
DN PREV200900315420

TI Evidence for Elevated Delta6-Desaturase Expression and Activity in the Postmortem Prefrontal Cortex of Schizophrenic Patients.

AU Liu, Yanhong [Reprint Author]; Jandacek, Ronald; Rider, Therese; Tso, Patrick; McNamara, Robert K.

CS Univ Cincinnati, Dept Psychiat, Cincinnati, OH USA

SO Biological Psychiatry, (APR 15 2009) Vol. 65, No. 8, Suppl. S, pp. 202S.
Meeting Info.: 64th Annual Convention of the Society-of-Biological-Psychiatry. Vancouver, CANADA. May 14 -16, 2009. Soc Biol Psychiat.
CODEN: BIPCBF. ISSN: 0006-3223.

DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 20 May 2009
Last Updated on STN: 20 May 2009

L3 ANSWER 3 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2005:167823 BIOSIS
DN PREV200500170147

TI Molecular cloning and functional characterization of fatty acyl desaturase and elongase cDNAs involved in the production of eicosapentaenoic and docosahexaenoic acids from alpha-linolenic acid in Atlantic salmon (*Salmo salar*).

AU Hastings, Nicola; Agaba, Morris K.; Tocher, Douglas R. [Reprint Author]; Zheng, Xiaozhong; Dickson, Cathryn A.; Dick, James R.; Teale, Alan J.

CS Inst Aquaculture, Univ Stirling, Stirling, FK9 4LA, UK
d.r.tocher@stir.ac.uk

SO Marine Biotechnology (New York), (September 2004) Vol. 6, No. 5, pp. 463-474. print.
ISSN: 1436-2228 (ISSN print).

DT Article
LA English

ED Entered STN: 4 May 2005
Last Updated on STN: 4 May 2005

L3 ANSWER 4 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2005:17247 BIOSIS
DN PREV200500017046

TI Novel fatty acid elongases and their use for the reconstitution of docosahexaenoic acid biosynthesis.

AU Meyer, Astrid; Kirsch, Helene; Domergue, Frederic; Abbadi, Amine; Sperling, Petra; Bauer, Joerg; Cirpus, Petra; Zank, Thorsten K.; Moreau, Herve; Roscoe, Thomas J.; Zahringer, Ulrich; Heinz, Ernst [Reprint Author]

CS Biozentrum Klein Flottbek, Univ Hamburg, D-22609, Hamburg, Germany
eheinz@botanik.uni-hamburg.de

SO Journal of Lipid Research, (October 2004) Vol. 45, No. 10, pp. 1899-1909. print.
CODEN: JLPRAW. ISSN: 0022-2275.

DT Article
LA English

ED Entered STN: 22 Dec 2004
Last Updated on STN: 22 Dec 2004

L3 ANSWER 5 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2004:331488 BIOSIS
DN PREV200400334002

TI Effects of diets containing vegetable oil on expression of genes involved
in highly unsaturated fatty acid biosynthesis in liver of Atlantic salmon
(*Salmo salar*).
AU Zheng, Xiaozhong; Tocher, Douglas R. [Reprint Author]; Dickson, Cathryn
A.; Bell, J. Gordon; Teale, Alan J.
CS Inst Aquaculture, Univ Stirling, Airthrey Rd, Stirling, FK9 4LA, Scotland
d.r.tocher@stir.ac.uk
SO Aquaculture, (June 2004) Vol. 236, No. 1-4, pp. 467-483. print.
ISSN: 0044-8486 (ISSN print).
DT Article
LA English
ED Entered STN: 4 Aug 2004
Last Updated on STN: 4 Aug 2004

L3 ANSWER 6 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2004:325761 BIOSIS
DN PREV200400325333

TI Production of very long chain polyunsaturated omega-3 and omega-6 fatty
acids in plants.
AU Qi, Baoxiu [Reprint Author]; Fraser, Tom; Mugford, Sam; Dobson, Gary;
Sayanova, Olga; Butler, Justine; Napier, Johnathan A.; Stobart, A. Keith;
Lazarus, Colin M.
CS Dept Biol and Biochem, Univ Bath, 4 South, Claverton Down, Bath, Avon, BA2
7AY, England
bsssbq@bath.ac.uk
SO Nature Biotechnology, (June 2004) Vol. 22, No. 6, pp. 739-745. print.
ISSN: 1087-0156 (ISSN print).
DT Article
LA English
ED Entered STN: 29 Jul 2004
Last Updated on STN: 29 Jul 2004

L3 ANSWER 7 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2004:122156 BIOSIS
DN PREV200400123165

TI Effects of dietary cis 9, trans 11-18:2, trans 10, cis 12-18:2, or
vaccenic acid (trans 11-18:1) during lactation on body composition, tissue
fatty acid profiles, and litter growth in mice.
AU Loor, Juan J. [Reprint Author]; Lin, Xiaobo; Herbein, Joseph H.
CS Dairy Science Department, Virginia Tech, Blacksburg, VA, 24061-0315, USA
jloor@uiuc.edu
SO British Journal of Nutrition, (December 2003) Vol. 90, No. 6, pp.
1039-1048. print.
CODEN: BJNUAV. ISSN: 0007-1145.
DT Article
LA English
ED Entered STN: 3 Mar 2004
Last Updated on STN: 3 Mar 2004

L3 ANSWER 8 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2003:491010 BIOSIS
DN PREV200300493364

TI Acyl carriers used as substrates by the desaturases and elongases involved
in very long-chain polyunsaturated fatty acids biosynthesis reconstituted
in yeast.

AU Domergue, Frederic [Reprint Author]; Abbadi, Amine; Ott, Claudia; Zank, Thorsten K.; Zaehringer, Ulrich; Heinz, Ernst

CS Institut fuer Allgemeine Botanik, Universitaet Hamburg, Ohnhorststrasse 18, 22609, Hamburg, Germany
fredDo@botanik.uni-hamburg.de

SO Journal of Biological Chemistry, (September 12 2003) Vol. 278, No. 37, pp. 35115-35126. print.
CODEN: JBCHA3. ISSN: 0021-9258.

DT Article

LA English

ED Entered STN: 22 Oct 2003
Last Updated on STN: 22 Oct 2003

L3 ANSWER 9 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2003:401806 BIOSIS
DN PREV200300401806

TI Dietary conjugated linoleic acid reduces long chain polyunsaturated fatty acid biosynthesis in brain and liver tissues of neonatal piglets.

AU Bo, Jenny [Reprint Author]; Lin, Xi; Mathews Oliver, Susan A.; Harrell, Robert J.; Odle, Jack

CS Animal Science, NC State University, Box 7621, Raleigh, NC, 27695-7621, USA
boj@ncssm.edu; lin_xi@ncsu.edu; samathew@unity.ncsu.edu;
bob_harrell@ncsu.edu; jack_odle@ncsu.edu

SO FASEB Journal, (March 2003) Vol. 17, No. 4-5, pp. Abstract No. 454.23.
<http://www.fasebj.org/>. e-file.
Meeting Info.: FASEB Meeting on Experimental Biology: Translating the Genome. San Diego, CA, USA. April 11-15, 2003. FASEB.
ISSN: 0892-6638 (ISSN print).

DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 3 Sep 2003
Last Updated on STN: 3 Sep 2003

L3 ANSWER 10 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2003:43109 BIOSIS
DN PREV200300043109

TI Expression of meadowfoam Des5 and FAE1 genes in yeast and in transgenic soybean somatic embryos, and their roles in fatty acid modification.

AU Marillia, Elizabeth-France; Giblin, E. Michael; Covello, Patrick S.; Taylor, David C. [Reprint Author]

CS Seed Oil Biotechnology Group, National Research Council of Canada, Plant Biotechnology Institute, 110 Gymnasium Place, Saskatoon, SK, S7N 0W9, Canada
David.taylor@nrc.ca

SO Plant Physiology and Biochemistry (Paris), (October 2002) Vol. 40, No. 10, pp. 821-828. print.
CODEN: PPBIEX. ISSN: 0981-9428.

DT Article

LA English

ED Entered STN: 15 Jan 2003
Last Updated on STN: 15 Jan 2003

L3 ANSWER 11 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2002:514895 BIOSIS
DN PREV200200514895

TI Cloning and functional characterization of *Phaeodactylum tricornutum* front-end desaturases involved in eicosapentaenoic acid biosynthesis.

AU Domergue, Frederic [Reprint author]; Lerchl, Jens; Zaehringer, Ulrich; Heinz, Ernst

CS Plant Science Sweden AB, SE-26831, Svalov, Sweden
fredDo@botanik.uni-hamburg.de

SO European Journal of Biochemistry, (August, 2002) Vol. 269, No. 16, pp. 4105-4113. print.
CODEN: EJBCAI. ISSN: 0014-2956.

DT Article

LA English

ED Entered STN: 2 Oct 2002
Last Updated on STN: 2 Oct 2002

L3 ANSWER 12 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

AN 2002:472024 BIOSIS

DN PREV200200472024

TI Cloning and functional characterisation of an enzyme involved in the elongation of DELTA6-polyunsaturated fatty acids from the moss *Physcomitrella patens*.

AU Zank, Thorsten K. [Reprint author]; Zaehringer, Ulrich; Beckmann, Christoph; Pohnert, Georg; Boland, Wilhelm; Holtorf, Hauke; Reski, Ralf; Lerchl, Jens; Heinz, Ernst

CS Universitaet Hamburg, Institut fuer Allgemeine Botanik, Ohnhorststrasse 18, 22609, Hamburg, Germany
fb8a001@botanik.uni-hamburg.de

SO Plant Journal, (August, 2002) Vol. 31, No. 3, pp. 255-268. print.
ISSN: 0960-7412.

DT Article

LA English

ED Entered STN: 11 Sep 2002
Last Updated on STN: 11 Sep 2002

L3 ANSWER 13 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

AN 2002:326588 BIOSIS

DN PREV200200326588

TI Genetic dissection of polyunsaturated fatty acid synthesis in *Caenorhabditis elegans*.

AU Watts, Jennifer L.; Browse, John [Reprint author]

CS Institute of Biological Chemistry, Washington State University, Pullman, WA, 99164-6340, USA
jab@wsu.edu

SO Proceedings of the National Academy of Sciences of the United States of America, (April 30, 2002) Vol. 99, No. 9, pp. 5854-5859. print.
CODEN: PNASA6. ISSN: 0027-8424.

DT Article

LA English

ED Entered STN: 5 Jun 2002
Last Updated on STN: 5 Jun 2002

L3 ANSWER 14 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

AN 2002:78109 BIOSIS

DN PREV200200078109

TI *Helicobacter pylori* alters n-6 fatty acid metabolism and prostaglandin E2 synthesis in rat gastric mucosal cells.

AU Nakaya, Atsuko [Reprint author]; Wakabayashi, Hiroyuki; Imamura, Lisa; Fukuta, Kanako; Makimoto, Shinya; Naganuma, Kotaro; Orihara, Tadahiro; Minemura, Masami; Shimizu, Yukihiro; Nagasawa, Tetsuro; Hamazaki, Tomohito; Watanabe, Akiharu

CS Third Department of Internal Medicine, Faculty of Medicine, Toyama Medical

and Pharmaceutical University, 2630 Sugitani, Toyama, 930-0194, Japan
atsuko_n@pop12.odn.ne.jp

SO Journal of Gastroenterology and Hepatology, (November, 2001) Vol. 16, No. 11, pp. 1197-1205. print.
CODEN: JGHEEO. ISSN: 0815-9319.

DT Article
LA English
ED Entered STN: 16 Jan 2002
Last Updated on STN: 25 Feb 2002

L3 ANSWER 15 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2002:52706 BIOSIS
DN PREV200200052706
TI Activity of human DELTA5 and DELTA6 desaturases on multiple n-3 and n-6 polyunsaturated fatty acids.
AU de Antueno, Roberto J. [Reprint author]; Knickle, Leah C.; Smith, Heidi; Elliot, Michele L.; Allen, Stephen J.; Nwaka, Solomon; Winther, Michael D.
CS 1520 Ashlee Drive, Coldbrook, NS, B4R 1A1, Canada
r.deantueno@mailexcite.com
SO FEBS Letters, (30 November, 2001) Vol. 509, No. 1, pp. 77-80. print.
CODEN: FEBLAL. ISSN: 0014-5793.
DT Article
LA English
OS Genbank-AF126799; Genbank-AF226273
ED Entered STN: 9 Jan 2002
Last Updated on STN: 26 Feb 2002

L3 ANSWER 16 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2001:186335 BIOSIS
DN PREV200100186335
TI Cloning and functional expression of the first plant fatty acid elongase specific for DELTA6-polyunsaturated fatty acids.
AU Zank, T. K.; Zaehringer, U.; Lerchl, J.; Heinz, E. [Reprint author]
CS Institut fuer Allgemeine Botanik, Universitaet Hamburg, Ohnhorststrasse 18, D-22609, Hamburg, Germany
eheinz@botanik.uni-hamburg.de
SO Biochemical Society Transactions, (December, 2000) Vol. 28, No. 6, pp. 654-658. print.
CODEN: BCSTB5. ISSN: 0300-5127.
DT Article
LA English
ED Entered STN: 20 Apr 2001
Last Updated on STN: 18 Feb 2002

L3 ANSWER 17 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2000:519599 BIOSIS
DN PREV200000519599
TI Production of fatty acid components of meadowfoam oil in somatic soybean embryos.
AU Cahoon, Edgar B.; Marillia, Elizabeth-France; Stecca, Kevin L.; Hall, Sarah E.; Taylor, David C.; Kinney, Anthony J. [Reprint author]
CS Experimental Station, DuPont Nutrition and Health, Wilmington, DE, 19880-0402, USA
SO Plant Physiology (Rockville), (September, 2000) Vol. 124, No. 1, pp. 243-251. print.
CODEN: PLPHAY. ISSN: 0032-0889.
DT Article
LA English

ED Entered STN: 29 Nov 2000
Last Updated on STN: 11 Jan 2002

L3 ANSWER 18 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2000:386754 BIOSIS
DN PREV200000386754
TI Identification and characterization of an enzyme involved in the elongation of n-6 and n-3 polyunsaturated fatty acids.
AU Parker-Barnes, Jennifer M.; Das, Tapas; Bobik, Emil; Leonard, Amanda E.; Thurmond, Jennifer M.; Chaung, Lu-Te; Huang, Yung-Sheng; Mukerji, Pradip [Reprint author]
CS Ross Products Division, Abbott Laboratories, Columbus, OH, 43215, USA
SO Proceedings of the National Academy of Sciences of the United States of America, (July 18, 2000) Vol. 97, No. 15, pp. 8284-8289. print.
CODEN: PNASA6. ISSN: 0027-8424.

DT Article
LA English
ED Entered STN: 13 Sep 2000
Last Updated on STN: 8 Jan 2002

L3 ANSWER 19 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2000:360335 BIOSIS
DN PREV200000360335
TI Characterisation of enzymes determining fatty acid chain length in developing seeds of *Limnanthes douglasii*.
AU Sandager, Line [Reprint author]; Stymne, Sten
CS Department of Medicinal Chemistry, Royal Danish School of Pharmacy, Universitetsparken 2, DK-2100, Copenhagen, Denmark
SO Journal of Plant Physiology, (May, 2000) Vol. 156, No. 5-6, pp. 617-622. print.
CODEN: JPPHEY. ISSN: 0176-1617.

DT Article
LA English
ED Entered STN: 23 Aug 2000
Last Updated on STN: 8 Jan 2002

L3 ANSWER 20 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2000:180510 BIOSIS
DN PREV200000180510
TI Fatty acid composition of phospholipids, triglycerides and cholesterol in serum of castrated and estradiol treated rats.
AU Cinci, G.; Guerranti, R.; Pagani, R.; Carlucci, F.; Terzuoli, L.; Rosi, F.; Marinello, E. [Reprint author]
CS Istituto di Biochimica ed Enzimologia, Nuovi Istituti Biologici, Universita di Siena, Via Aldo Moro (San Miniato), 53100, Siena, Italy
SO Life Sciences, (March 17, 2000) Vol. 66, No. 17, pp. 1647-1654. print.
CODEN: LIFSAK. ISSN: 0024-3205.

DT Article
LA English
ED Entered STN: 11 May 2000
Last Updated on STN: 4 Jan 2002

L3 ANSWER 21 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2000:37671 BIOSIS
DN PREV200000037671
TI Arachidonic, eicosapentaenoic, and biosynthetically related fatty acids in the seed lipids from a primitive gymnosperm, *Agathis robusta*.

AU Wolff, Robert L. [Reprint author]; Christie, William W.; Pedrono, Frederique; Marpeau, Anne M.

CS ISTAB, Universite Bordeaux 1, Av. des Facultes, 33405, Talence Cedex, France

SO Lipids, (Oct., 1999) Vol. 34, No. 10, pp. 1083-1097. print.

CODEN: LPDSAP. ISSN: 0024-4201.

DT Article

LA English

ED Entered STN: 19 Jan 2000
Last Updated on STN: 31 Dec 2001

L3 ANSWER 22 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

AN 1999:288211 BIOSIS

DN PREV199900288211

TI Fatty acid metabolism in marine fish: Low activity of fatty acyl DELTA5 desaturation in gilthead sea bream (*Sparus aurata*) cells.

AU Tocher, Douglas R. [Reprint author]; Ghioni, Cristina

CS Unit of Aquatic Biochemistry, Institute of Aquaculture, University of Stirling, Stirling, FK9 4LA, UK

SO Lipids, (May, 1999) Vol. 34, No. 5, pp. 433-440. print.

CODEN: LPDSAP. ISSN: 0024-4201.

DT Article

LA English

ED Entered STN: 5 Aug 1999
Last Updated on STN: 5 Aug 1999

L3 ANSWER 23 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

AN 1999:278133 BIOSIS

DN PREV199900278133

TI Fatty acid desaturation: Effect of alphafetoprotein on alpha-linolenic acid conversion by fetal rat hepatocytes.

AU Alava, M. A.; Iturralde, M. [Reprint author]; Gonzalez, B.; Pineiro, A.

CS Departamento de Bioquimica y Biologia Molecular y Celular, Facultad de Veterinaria, Universidad de Zaragoza, Miguel Servet 177, E 50013, Zaragoza, Spain

SO Prostaglandins Leukotrienes and Essential Fatty Acids, (March, 1999) Vol. 60, No. 3, pp. 209-215. print.

CODEN: PLEAEU. ISSN: 0952-3278.

DT Article

LA English

ED Entered STN: 28 Jul 1999
Last Updated on STN: 28 Jul 1999

L3 ANSWER 24 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

AN 1999:174288 BIOSIS

DN PREV199900174288

TI Low C18 to C20 fatty acid elongase activity and limited conversion of stearidonic acid, 18:4(n-3), to eicosapentaenoic acid, 20:5(n-3), in a cell line from the turbot, *Scophthalmus maximus*.

AU Ghioni, Cristina [Reprint author]; Tocher, Douglas R.; Bell, Michael V.; Dick, James R.; Sargent, John R.

CS Institute of Aquaculture, University of Stirling, Stirling, FK9 4LA, UK

SO Biochimica et Biophysica Acta, (Feb. 25, 1999) Vol. 1437, No. 2, pp. 170-181. print.

CODEN: BBACAO. ISSN: 0006-3002.

DT Article

LA English

ED Entered STN: 5 May 1999

Last Updated on STN: 5 May 1999

L3 ANSWER 25 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
STN
AN 1999:35557 BIOSIS
DN PREV199900035557
TI The seed fatty acid composition and the distribution of DELTA5
-olefinic acids in the triacylglycerols of some Taxaceae (Taxus and
Torreya).
AU Wolff, Robert L. [Reprint author]; Pedrono, Frederique; Marpeau, Anne M.;
Christie, William W.; Gunstone, Frank D.
CS ISTAB, Lab. Lipochimie Alimentaire, Univ. Bordeaux, 1 Allee des Facultes,
33450 Talence Cedex, France
SO Journal of the American Oil Chemists' Society, (Nov., 1998) Vol. 75, No.
11, pp. 1637-1641. print.
CODEN: JAOCA7. ISSN: 0003-021X.
DT Article
LA English
ED Entered STN: 3 Feb 1999
Last Updated on STN: 3 Feb 1999

L3 ANSWER 26 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
STN
AN 1998:139542 BIOSIS
DN PREV199800139542
TI Dietary fish oil inhibits DELTA6-desaturase activity in vivo.
AU Raz, Amiram [Reprint author]; Kamin-Belsky, Nurit; Przedekki, Fiorenza;
Obukowicz, Mark
CS Dep. Biochem., George S. Wise Fac. Life Sci., Tel-Aviv Univ., Tel-Aviv
69978, Israel
SO Journal of the American Oil Chemists' Society, (Feb., 1998) Vol. 75, No.
2, pp. 241-245. print.
CODEN: JAOCA7. ISSN: 0003-021X.
DT Article
LA English
ED Entered STN: 20 Mar 1998
Last Updated on STN: 20 Mar 1998

L3 ANSWER 27 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
STN
AN 1995:203991 BIOSIS
DN PREV199598218291
TI Modulation in DELTA-9, DELTA-6, and DELTA-5 fatty acid desaturase activity
in the human intestinal CaCo-2 cell line.
AU Dias, V. C.; Parsons, H. G. [Reprint author]
CS Gasgroenterol. Res. Group, Fac. Med., Univ. Calgary, Calgary, AB T2N 1N4,
Canada
SO Journal of Lipid Research, (1995) Vol. 36, No. 3, pp. 552-563.
CODEN: JLPRAW. ISSN: 0022-2275.
DT Article
LA English
ED Entered STN: 23 May 1995
Last Updated on STN: 9 Jun 1995

=> D 4,17,18 FULL
'FULL' IS NOT A VALID FORMAT FOR FILE 'BIOSIS'

The following are valid formats:

The default display format is BIB.

ABS ----- AB
 ALL ----- AN, DN, TI, AU, CS, PI, SO, DT, FS, LA, OS, ED, AB,
 NCL, CC, IT (CT, ST), GT, ORGN, RN, CN, GEN
 BIB ----- AN, DN, TI, AU, CS, PI, SO, DT, FS, LA, OS, ED
 CBIB ----- AN, compressed bibliographic information
 DALL ----- ALL, delimited for post-processing
 IABS ----- ABS, with text label
 IALL ----- ALL, indented with text labels
 IBIB ----- BIB, indented with text labels
 IIIND ----- IND, indented with text labels
 IND ----- NCL, CC, IT (CT, ST), GT, ORGN, RN, CN, GEN
 HIT ----- all fields containing hit search terms
 HITIND ----- IND
 KWIC ----- Hit terms plus 20 words on either side
 OCC ----- number of occurrences of hit terms and fields
 in which they occur

Hit terms will be highlighted in all available fields except MY and PY.

To display a particular field or fields, enter the display field codes. For a list of display field codes, enter 'HELP DFIELDS' at an arrow prompt (=>). Examples of formats include: 'BIB'; 'AB'; 'SO'. You may specify the format fields in any order, and the information will be displayed in the same order as the format specification.

The same formats (except for HIT, HITIND, KWIC, and OCC) may be used with the DISPLAY ACC command to display the record for a specified Accession Number.

ENTER DISPLAY FORMAT (BIB):ALL

L3 ANSWER 4 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
 AN 2005:17247 BIOSIS
 DN PREV200500017046
 TI Novel fatty acid elongases and their use for the reconstitution of docosahexaenoic acid biosynthesis.
 AU Meyer, Astrid; Kirsch, Helene; Domergue, Frederic; Abbadi, Amine; Sperling, Petra; Bauer, Joerg; Cirpus, Petra; Zank, Thorsten K.; Moreau, Herve; Roscoe, Thomas J.; Zahringer, Ulrich; Heinz, Ernst [Reprint Author]
 CS Biozentrum Klein Flottbek, Univ Hamburg, D-22609, Hamburg, Germany eheinz@botanik.uni-hamburg.de
 SO Journal of Lipid Research, (October 2004) Vol. 45, No. 10, pp. 1899-1909.
 print.
 CODEN: JLPRAW. ISSN: 0022-2275.
 DT Article
 LA English
 ED Entered STN: 22 Dec 2004
 Last Updated on STN: 22 Dec 2004
 AB In algae, the biosynthesis of docosahexaenoic acid (22:6omega3; DHA) proceeds via the elongation of eicosapentaenoic acid (20:5omega3; EPA) to 22:5omega3, which is required as a substrate for the final DELTA4 desaturation. To isolate the elongase specific for this step, we searched expressed sequence tag and genomic databases from the algae Ostreococcus tauri and Thalassiosira pseudonana, from the fish Oncorhynchus mykiss, from the frog Xenopus laevis, and from the sea squirt Ciona intestinalis using as a query the elongase sequence PpPSEL from the moss Physcomitrella patens. The open reading frames of the identified elongase candidates were expressed in yeast for functional characterization. By this, we identified two types of

elongases from *O. tauri* and *T. pseudonana*: one specific for the elongation of (DELTA6-)C18-PUFAs and one specific for (DELTA5-)C20-PUFAs, showing highest activity with EPA. The clones isolated from *O. mykiss*, *X. laevis*, and *C. intestinalis* accepted both C18- and C20-PUFAs. By coexpression of the DELTA6- and DELTA5-elongases from *T. pseudonana* and *O. tauri*, respectively, with the DELTA5- and DELTA4-desaturases from two other algae we successfully implemented DHA synthesis in stearidonic acid-fed yeast. This may be considered an encouraging first step in future efforts to implement this biosynthetic sequence into transgenic oilseed crops.

CC Biochemistry studies - Lipids 10066
Enzymes - General and comparative studies: coenzymes 10802
Plant physiology - Enzymes 51518

IT Major Concepts
Enzymology (Biochemistry and Molecular Biophysics)

IT Chemicals & Biochemicals
Delta 4: desaturation; Delta-4-desaturase; Delta-5-elongase;
Delta-6-elongase; carbon 18 polyunsaturated fatty acid
[C18-PUFA]; carbon 20 polyunsaturated fatty acid [C20-PUFA];
delta-5-desaturase; docosahexaenoic acid [DHA]: biosynthesis;
eicosapentaenoic acid [EPA]; elongase sequence: PpPSEL; fatty
acid elongase; open reading frame; polyunsaturated fatty acid
[PUFA]; stearidonic acid

IT Methods & Equipment
genomic database: computer software

ORGN Classifier
Chlorophyta 13300
Super Taxa
Algae; Plantae
Organism Name
Ostreococcus tauri (species)
Taxa Notes
Algae, Microorganisms, Nonvascular Plants, Plants

ORGN Classifier
Chrysophyta 13500
Super Taxa
Algae; Plantae
Organism Name
Thalassiosira pseudonana (species)
Taxa Notes
Algae, Microorganisms, Nonvascular Plants, Plants

ORGN Classifier
Fungi 15000
Super Taxa
Plantae
Organism Name
yeast (common)
Taxa Notes
Fungi, Microorganisms, Nonvascular Plants, Plants

ORGN Classifier
Muscii 21600
Super Taxa
Bryophyta; Plantae
Organism Name
Physcomitrella patens (species)
Taxa Notes
Bryophytes, Nonvascular Plants, Plants

ORGN Classifier
Osteichthyes 85206
Super Taxa
Pisces; Vertebrata; Chordata; Animalia

Organism Name
Oncorhynchus mykiss (species)
Taxa Notes
Animals, Chordates, Fish, Nonhuman Vertebrates, Vertebrates
ORGN Classifier
Salientia 85306
Super Taxa
Amphibia; Vertebrata; Chordata; Animalia
Organism Name
Xenopus laevis (species)
Taxa Notes
Amphibians, Animals, Chordates, Nonhuman Vertebrates, Vertebrates
ORGN Classifier
Urochordata 85104
Super Taxa
Protochordata; Chordata; Animalia
Organism Name
Ciona intestinalis (species)
Taxa Notes
Animals, Chordates, Invertebrates, Protochordates
RN 64427-79-8 (Delta-4-desaturase)
51901-23-6 (delta-5-desaturase)
6217-54-5Q (docosahexaenoic acid)
25167-62-8Q (docosahexaenoic acid)
32839-18-2Q (docosahexaenoic acid)
6217-54-5Q (DHA)
25167-62-8Q (DHA)
32839-18-2Q (DHA)
10417-94-4Q (eicosapentaenoic acid)
25378-27-2Q (eicosapentaenoic acid)
32839-30-8Q (eicosapentaenoic acid)
10417-94-4Q (EPA)
25378-27-2Q (EPA)
32839-30-8Q (EPA)
69403-06-1Q (fatty acid elongase)
94219-29-1Q (fatty acid elongase)
20290-75-9 (stearidonic acid)

L3 ANSWER 17 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

AN 2000:519599 BIOSIS

DN PREV200000519599

TI Production of fatty acid components of meadowfoam oil in somatic soybean embryos.

AU Cahoon, Edgar B.; Marillia, Elizabeth-France; Stecca, Kevin L.; Hall, Sarah E.; Taylor, David C.; Kinney, Anthony J. [Reprint author]

CS Experimental Station, DuPont Nutrition and Health, Wilmington, DE, 19880-0402, USA

SO Plant Physiology (Rockville), (September, 2000) Vol. 124, No. 1, pp. 243-251. print.
CODEN: PLPHAY. ISSN: 0032-0889.

DT Article

LA English

ED Entered STN: 29 Nov 2000
Last Updated on STN: 11 Jan 2002

AB The seed oil of meadowfoam (*Limnanthes alba*) and other *Limnanthes* spp. is enriched in the unusual fatty acid DELTA5-eicosenoic acid (20:1DELTA5). This fatty acid has physical and chemical properties that make the seed oil of these plants useful for a number of industrial applications. An expressed sequence tag approach was used to identify cDNAs for enzymes involved in the biosynthesis of 20:1DELTA5). By random

sequencing of a library prepared from developing *Limnanthes douglasii* seeds, a class of cDNAs was identified that encode a homolog of acyl-coenzyme A (CoA) desaturases found in animals, fungi, and cyanobacteria. Expression of a cDNA for the *L. douglasii* acyl-CoA desaturase homolog in somatic soybean (*Glycine max*) embryos behind a strong seed-specific promoter resulted in the accumulation of DELTA5-hexadecenoic acid to amounts of 2% to 3% (w/w) of the total fatty acids to single embryos. DELTA5-Octadecenoic acid and 20:1DELTA5 also composed <1% (w/w) each of the total fatty acids of these embryos. In addition, cDNAs were identified from the *L. douglasii* expressed sequence tags that encode a homolog of fatty acid elongase 1 (FAE1), a beta-ketoacyl-CoA synthase that catalyzes the initial step of very long-chain fatty acid synthesis. Expression of the *L. douglasii* FAE1 homolog in somatic soybean embryos was accompanied by the accumulation of C20 and C22 fatty acids, principally as eicosanoic acid, to amounts of 18% (w/w) of the total fatty acids of single embryos. To partially reconstruct the biosynthetic pathway of 20:1DELTA5 in transgenic plant tissues, cDNAs for the *L. douglasii* acyl-CoA desaturase and FAE1 were co-expressed in somatic soybean embryos. In the resulting transgenic embryos, 20:1DELTA5 and DELTA5-docosenoic acid composed up to 12% of the total fatty acids.

CC Plant physiology - Metabolism 51519
Biochemistry studies - Lipids 10066
Metabolism - General metabolism and metabolic pathways 13002
Plant physiology - Reproduction 51512

IT Major Concepts
Metabolism

IT Chemicals & Biochemicals
20:1-delta-5-docosenoic acid; *Limnanthes* seed oil: fatty acid components; acyl-CoA desaturase; beta-ketoacyl-CoA synthase; delta-5-docosenoic acid; eicosanoic acid; fatty acid: production; fatty acid elongase 1

IT Miscellaneous Descriptors
biosynthetic pathway

ORGN Classifier
Leguminosae 26260
Super Taxa
Dicotyledones; Angiospermae; Spermatophyta; Plantae
Organism Name
Glycine max [soybean]: somatic embryo, transgenic
Taxa Notes
Angiosperms, Dicots, Plants, Spermatophytes, Vascular Plants

ORGN Classifier
Limnanthaceae 26280
Super Taxa
Dicotyledones; Angiospermae; Spermatophyta; Plantae
Organism Name
Limnanthes alba [meadowfoam]: seed
Limnanthes douglasii: seed
Limnanthes spp.: seed
Taxa Notes
Angiosperms, Dicots, Plants, Spermatophytes, Vascular Plants

RN 88414-92-0 (beta-ketoacyl-CoA synthase)
506-30-9 (eicosanoic acid)

L3 ANSWER 18 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

AN 2000:386754 BIOSIS

DN PREV200000386754

TI Identification and characterization of an enzyme involved in the elongation of n-6 and n-3 polyunsaturated fatty acids.

AU Parker-Barnes, Jennifer M.; Das, Tapas; Bobik, Emil; Leonard, Amanda E.; Thurmond, Jennifer M.; Chaung, Lu-Te; Huang, Yung-Sheng; Mukerji, Pradip [Reprint author]

CS Ross Products Division, Abbott Laboratories, Columbus, OH, 43215, USA

SO Proceedings of the National Academy of Sciences of the United States of America, (July 18, 2000) Vol. 97, No. 15, pp. 8284-8289. print.

CODEN: PNASA6. ISSN: 0027-8424.

DT Article

LA English

ED Entered STN: 13 Sep 2000
Last Updated on STN: 8 Jan 2002

AB The enzymes that are involved in the elongation of fatty acids differ in terms of the substrates on which they act. To date, the enzymes specifically involved in the biosynthesis of polyunsaturated fatty acids have not yet been identified. In an attempt to identify a gene(s) encoding an enzyme(s) specific for the elongation of gamma-linolenic acid (GLA) (18:3n-6), a cDNA expression library was made from the fungus *Mortierella alpina*. The cDNA library constructed in a yeast expression vector was screened by measuring the expressed elongase activity (conversion of GLA to dihomo-GLA (20:3n-6)) from an individual yeast clone. In this report, we demonstrate the isolation of a cDNA (GLELO) whose encoded protein (GLELOp) was involved in the conversion of GLA to dihomo-GLA in an efficient manner (60% conversion). This cDNA contains a 957-nucleotide ORF that encodes a protein of 318 amino acids. Substrate specificity analysis revealed that this fungal enzyme acted also on stearidonic acid (18:4n-3). This report identifies and characterizes an elongase subunit that acts specifically on the two DELTA6-desaturation products, 18:3n-6 and 18:4n-3. When this GLELO cDNA was coexpressed with *M. alpina* DELTA5-desaturase cDNA in yeast, it resulted in the conversion of GLA to arachidonic acid (20:4n-6) as well as the conversion of stearidonic acid to eicosopentaenoic acid (20:5n-3). Thus, this GLELO gene may play an critical role in the bio-production of both n-6 and n-3 polyunsaturated fatty acids.

CC Biochemistry studies - Lipids 10066
Genetics - General 03502
Genetics - Plant 03504
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
Plant physiology - Chemical constituents 51522

IT Major Concepts
 Biochemistry and Molecular Biophysics; Molecular Genetics (Biochemistry and Molecular Biophysics)

IT Chemicals & Biochemicals
 arachidonic acid; cDNA [complementary DNA]: library; eicosapentaenoic acid; gamma-linolenic acid; n-3 polyunsaturated fatty acid: biosynthesis, elongation; n-6 polyunsaturated fatty acid: biosynthesis, elongation; stearidonic acid; *Mortierella alpina* GLELO gene

IT Miscellaneous Descriptors
 amino acid sequence

ORGN Classifier
 Phycomycetes 15900
 Super Taxa
 Fungi; Plantae
 Organism Name
 Mortierella alpina
 Taxa Notes
 Fungi, Microorganisms, Nonvascular Plants, Plants

RN 506-32-1 (arachidonic acid)
10417-94-4Q (eicosapentaenoic acid)
25378-27-2Q (eicosapentaenoic acid)

32839-30-8Q (eicosapentaenoic acid)
506-26-3 (gamma-linolenic acid)
20290-75-9 (stearidonic acid)

=> S DELTA AND 5 AND ELONGASE
144030 DELTA
3068124 5
506 ELONGASE
L4 85 DELTA AND 5 AND ELONGASE

=> S DELTA ADJ 5 ADJ ELONGASE
144030 DELTA
613 ADJ
3068124 5
613 ADJ
506 ELONGASE
L5 0 DELTA ADJ 5 ADJ ELONGASE
(DELTA(W)ADJ(W)5(W)ADJ(W)ELONGASE)

=> D L4 1-20

L4 ANSWER 1 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2010:139604 BIOSIS
DN PREV201000139604
TI Protein restriction during pregnancy affects maternal liver lipid metabolism and fetal brain lipid composition in the rat.
AU Torres, Nimbe; Bautista, Claudia J.; Tovar, Armando R.; Ordaz, Guillermo; Rodriguez-Cruz, Maricela; Ortiz, Victor; Granados, Omar; Nathanielsz, Peter W.; Larrea, Fernando; Zambrano, Elena [Reprint Author]
CS Inst Nacl Nutr Salvador Zubiran, Dept Reprod Biol, Vasco de Quiroga 15, Secc 16, Mexico City 14000, DF, Mexico
zamgon@servidor.unam.mx
SO American Journal of Physiology - Endocrinology and Metabolism, (FEB 2010) Vol. 298, No. 2, pp. E270-E277.
ISSN: 0193-1849. E-ISSN: 1522-1555.
DT Article
LA English
ED Entered STN: 10 Mar 2010
Last Updated on STN: 10 Mar 2010

L4 ANSWER 2 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2010:131720 BIOSIS
DN PREV201000131720
TI A Multiplexed Cell Assay in HepG2 Cells for the Identification of Delta-5, Delta-6, and Delta-9 Desaturase and Elongase Inhibitors.
AU Zhang, Lei; Ramtohul, Yeeman; Gagne, Sebastien; Styhler, Angela; Wang, Hao; Guay, Jocelyne; Huang, Zheng [Reprint Author]
CS Merck Frosst Ctr Therapeut Res, POB 1005, Pointe Claire, PQ H9R 4P8, Canada
zhenghuang78@gmail.com
SO Journal of Biomolecular Screening, (FEB 2010) Vol. 15, No. 2, pp. 169-176.
ISSN: 1087-0571.
DT Article
LA English
ED Entered STN: 3 Mar 2010
Last Updated on STN: 3 Mar 2010

L4 ANSWER 3 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2010:115298 BIOSIS

DN PREV201000115298
TI Co-expression of Thraustochytrium sp FJN-10 Delta(5)-elongase and Delta(4)-desaturase in Saccharomyces cerevisiae.
AU Liu Yanru [Reprint Author]; Jiang Xianzhang; Gao Yuanyuan; Tian Baoyu; Chen Xiaofeng; Chen Jingqing; Huang Jianzhong
CS Fujian Normal Univ, Coll Life Sci, Minist Educ, Engn Res Ctr Ind Microbiol, Fuzhou 350108, Peoples R China
yrliu@fjnu.edu.cn
SO Chinese Journal of Applied and Environmental Biology, (2009) Vol. 15, No. 6, pp. 851-855.
ISSN: 1006-687X.
DT Article
LA Chinese
ED Entered STN: 24 Feb 2010
Last Updated on STN: 24 Feb 2010

L4 ANSWER 4 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2010:35842 BIOSIS
DN PREV201000035842
TI Method of producing polyunsaturated fatty acids, novel biosynthesis genes, and novel plant expression constructs.
AU Lerchl, Jens [Inventor]; Anonymous; Renz, Andreas [Inventor]; Heinz, Ernst [Inventor]; Domergue, Frederic [Inventor]; Zahringer, Ulrich [Inventor]
CS Svalov, Sweden
ASSIGNEE: BASF Plant Science GmbH
PI US 07615679 20091110
SO Official Gazette of the United States Patent and Trademark Office Patents, (NOV 10 2009)
CODEN: OGUPE7. ISSN: 0098-1133.
DT Patent
LA English
ED Entered STN: 30 Dec 2009
Last Updated on STN: 30 Dec 2009

L4 ANSWER 5 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2010:30309 BIOSIS
DN PREV201000030309
TI Hepatic Lipid Composition and Stearoyl-Coenzyme A Desaturase 1 mRNA Expression Can Be Estimated from Plasma VLDL Fatty Acid Ratios.
AU Peter, Andreas [Reprint Author]; Cegan, Alexander; Wagner, Silvia; Lehmann, Rainer; Stefan, Norbert; Koenigsrainer, Alfred; Koenigsrainer, Ingmar; Haering, Hans-Ulrich; Schleicher, Erwin
CS Univ Tubingen, Dept Internal Med, Div Endocrinol Diabet Vasc Med Nephrol and Clin Che, Otfried Muller Str 10, D-72076 Tubingen, Germany
Andreas.Peter@med.uni-tuebingen.de
SO Clinical Chemistry, (DEC 2009) Vol. 55, No. 12, pp. 2113-2120.
CODEN: CLCHAU. ISSN: 0009-9147.
DT Article
LA English
ED Entered STN: 30 Dec 2009
Last Updated on STN: 30 Dec 2009

L4 ANSWER 6 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:624382 BIOSIS
DN PREV200900625485
TI Can the rat liver maintain normal brain DHA metabolism in the absence of dietary DHA?.
AU Rapoport, Stanley I. [Reprint Author]; Igarashi, Miki
CS NIA, Brain Physiol and Metab Sect, NIH, Bldg 9, Room 1S128, 9000 Rockville Pike, Bethesda, MD 20892 USA

SO sir@helix.nih.gov
Prostaglandins Leukotrienes and Essential Fatty Acids, (AUG-SEP 2009) Vol. 81, No. 2-3, Sp. Iss. SI, pp. 119-123.
CODEN: PLEAEU. ISSN: 0952-3278.

DT Article
LA English
ED Entered STN: 12 Nov 2009
Last Updated on STN: 18 Nov 2009

L4 ANSWER 7 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:494568 BIOSIS
DN PREV200900495671

TI Prostate tumor growth can be modulated by dietarily targeting the 15-lipoxygenase (LO)-1 and cyclooxygenase (COX)-2 enzymes.
AU Kelavkar, Uddhav P. [Reprint Author]; Hutzley, Justin; McHugh, Kevin; Allen, Kenneth G. D.; Parwani, Anil
CS Univ Pittsburgh, Pittsburgh, PA USA
SO Proceedings of the American Association for Cancer Research Annual Meeting, (APR 2009) Vol. 50, pp. 716.
Meeting Info.: 100th Annual Meeting of the American-Association-for-Cancer-Research. Denver, CA, USA. April 18 -22, 2009. Amer Assoc Canc Res.
ISSN: 0197-016X.

DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 19 Aug 2009
Last Updated on STN: 19 Aug 2009

L4 ANSWER 8 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:481779 BIOSIS
DN PREV200900482882

TI Improved production of various polyunsaturated fatty acids through filamentous fungus Mortierella alpina breeding.
AU Sakuradani, Eiji; Ando, Akinori; Ogawa, Jun; Shimizu, Sakayu [Reprint Author]
CS Kyoto Univ, Div Appl Life Sci, Grad Sch Agr, Sakyo Ku, Oiwake Cho, Kyoto 6068502, Japan
sim@kais.kyoto-u.ac.jp
SO Applied Microbiology and Biotechnology, (AUG 2009) Vol. 84, No. 1, pp. 1-10.
CODEN: AMBIDG. ISSN: 0175-7598.

DT Article
General Review; (Literature Review)
LA English
ED Entered STN: 19 Aug 2009
Last Updated on STN: 9 Dec 2009

L4 ANSWER 9 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:429485 BIOSIS
DN PREV200900430588

TI Improvement of arachidonic acid and eicosapentaenoic acid production by increasing the copy number of the genes encoding fatty acid desaturase and elongase into *Pichia pastoris*.
AU Li, Yun-Tao; Li, Mao-Teng; Fu, Chu-Hua; Zhou, Peng-Peng; Liu, Jian-Min; Yu, Long-Jiang [Reprint Author]
CS Huazhong Univ Sci and Technol, Inst Resource Biol and Biotechnol, Coll Life Sci and Technol, Wuhan 430074, Peoples R China
yulongjiang@mail.hust.edu.cn
SO Biotechnology Letters, (JUL 2009) Vol. 31, No. 7, pp. 1011-1017.
CODEN: BILED3. ISSN: 0141-5492.

DT Article
LA English
OS GenBank-AY746355; EMBL-AY746355; DDJB-AY746355
ED Entered STN: 22 Jul 2009
Last Updated on STN: 25 Nov 2009

L4 ANSWER 10 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:408338 BIOSIS
DN PREV200900409441
TI Prostate Tumor Growth Can Be Modulated by Dietarily Targeting the 15-Lipoxygenase-1 and Cyclooxygenase-2 Enzymes.
AU Kelavkar, Uddhav P. [Reprint Author]; Hutzley, Justin; McHugh, Kevin; Allen, Kenneth G. D.; Parwani, Anil
CS G12E Hillman Canc Ctr UPCI Res Pavil, 5117 Ctr Ave, Pittsburgh, PA 15213 USA
kelavkarup@upmc.edu
SO Neoplasia (New York), (JUL 2009) Vol. 11, No. 7, pp. 692-699.
ISSN: 1522-8002.

DT Article
LA English
ED Entered STN: 8 Jul 2009
Last Updated on STN: 8 Jul 2009

L4 ANSWER 11 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:360391 BIOSIS
DN PREV200900361494
TI Effect of sire and sex on the intramuscular fatty acid profile and indices for enzyme activities in pigs.
AU Ntawubizi, M.; Raes, K.; Buys, N.; De Smet, S. [Reprint Author]
CS Univ Ghent, Fac Biosci Engn, Dept Anim Prod, Lab Anim Nutr and Anim Prod Qual, Proefhoevestr 10, B-9090 Melle, Belgium
martin.ntawubizi@ugent.be; katie.raes@howest.be;
nadine.buys@biw.kuleuven.be; stefaan.desmet@ugent.be
SO Livestock Science, (JUN 2009) Vol. 122, No. 2-3, pp. 264-270.
ISSN: 1871-1413.

DT Article
LA English
ED Entered STN: 11 Jun 2009
Last Updated on STN: 11 Jun 2009

L4 ANSWER 12 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:349001 BIOSIS
DN PREV200900350104
TI Physiological roles of fatty acyl desaturases and elongases in marine fish: Characterisation of cDNAs of fatty acyl Delta 6 desaturase and elovl5 elongase of cobia (*Rachycentron canadum*).
AU Zheng, Xiaozhong; Ding, Zhaokun; Xu, Youqing; Monroig, Oscar; Morais, Sofia; Tocher, Douglas R. [Reprint Author]
CS Univ Stirling, Inst Aquaculture, Stirling FK9 4LA, UK
d.r.tocher@stir.ac.uk
SO Aquaculture, (MAY 4 2009) Vol. 290, No. 1-2, pp. 122-131.
CODEN: AQCLAL. ISSN: 0044-8486.

DT Article
LA English
ED Entered STN: 11 Jun 2009
Last Updated on STN: 11 Jun 2009

L4 ANSWER 13 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN
AN 2009:321436 BIOSIS
DN PREV200900322539
TI Elevated delta-6 desaturase (FADS2) expression in the postmortem prefrontal cortex of schizophrenic patients: Relationship with fatty acid composition.
AU Liu, Yanhong; Jandacek, Ronald; Rider, Therese; Tso, Patrick; McNamara, Robert K. [Reprint Author]
CS Univ Cincinnati, Coll Med, Dept Psychiat, 231 Albert Sabin Way, Cincinnati, OH 45267 USA
robert.mcnamara@psychiatry.uc.edu
SO Schizophrenia Research, (APR 2009) Vol. 109, No. 1-3, pp. 113-120.
ISSN: 0920-9964.
DT Article
LA English
ED Entered STN: 20 May 2009
Last Updated on STN: 20 May 2009

L4 ANSWER 14 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:282405 BIOSIS
DN PREV200900283508
TI Isolation and Characterisation of a Delta 5-fatty Acid Elongase from the Marine Microalga *Pavlova salina*.
AU Robert, Stanley S.; Petrie, James R.; Zhou, Xue-Rong; Mansour, Maged P.; Blackburn, Susan I.; Green, Allan G.; Singh, Surinder P.; Nichols, Peter D. [Reprint Author]
CS CSIRO Marine and Atmospher Res, Food Futures Natl Res Flagship, GPO Box 1538, Hobart, Tas 7000, Australia
peter.nichols@csiro.au
SO Marine Biotechnology (New York), (JUN 2009) Vol. 11, No. 3, pp. 410-418.
ISSN: 1436-2228.
DT Article
LA English
ED Entered STN: 30 Apr 2009
Last Updated on STN: 30 Apr 2009

L4 ANSWER 15 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:125850 BIOSIS
DN PREV200900125850
TI Identification of Delta 9-Elongation Activity from *Thraustochytrium aureum* by Heterologous Expression in *Pichia pastoris*.
AU Lee, Jae-Cheol; Anbul, Periasamy; Kim, Won-Ho; Noh, Myung-Ju; Lee, Su-Jin; Seo, Jeong-Woo; Hur, Byung-Ki [Reprint Author]
CS Inha Univ, Dept Biol Engn, Inchon 402751, South Korea
biosys@inha.ac.kr
SO Biotechnology and Bioprocess Engineering, (SEP-OCT 2008) Vol. 13, No. 5, pp. 524-532.
ISSN: 1226-8372.
DT Article
LA English
OS NCBI-CS486301
ED Entered STN: 18 Feb 2009
Last Updated on STN: 18 Feb 2009

L4 ANSWER 16 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2009:119692 BIOSIS
DN PREV200900119692
TI Lower estimates of delta-5 desaturase and

elongase activity are related to adverse profiles for several metabolic risk factors in young Japanese women.

AU Murakami, Kentaro; Sasaki, Satoshi [Reprint Author]; Takahashi, Yoshiko; Uenishi, Kazuhiro; Watanabe, Tomoko; Kohri, Toshiyuki; Yarnasaki, Mitsuyo; Watanabe, Reiko; Baba, Keiko; Shibata, Katsurni; Takahashi, Toru; Hayabuchi, Hitomi; Ohki, Kazuko; Suzuki, Junko

CS Univ Tokyo, Sch Publ Hlth, Dept Social and Prevent Epidemiol, Tokyo 1130033, Japan
stssasak@m.u-tokyo.ac.jp

SO Nutrition Research, (DEC 2008) Vol. 28, No. 12, pp. 816-824.
CODEN: NTRSDC. ISSN: 0271-5317.

DT Article

LA English

ED Entered STN: 11 Feb 2009
Last Updated on STN: 11 Feb 2009

L4 ANSWER 17 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
2009:107878 BIOSIS
PREV200900107878

TI Coexpression of Elo-like enzyme and Delta 5, Delta 4-desaturases derived from *Thraustochytrium aureum* ATCC 34304 and the production of DHA and DPA in *Pichia pastoris*.

AU Kang, Dong-Hoon; Anbu, Periasamy; Kim, Won-Ho; Hur, Byung-Ki [Reprint Author]

CS Inha Univ, Dept Biol Engn, Inchon 402751, South Korea
biosys@inha.ac.kr

SO Biotechnology and Bioprocess Engineering, (JUL-AUG 2008) Vol. 13, No. 4, pp. 483-490.
ISSN: 1226-8372.

DT Article

LA English

OS GenBank-AF391543; EMBL-AF391543; DDBJ-AF391543; GenBank-CS486301; EMBL-CS486301; DDBJ-CS486301

ED Entered STN: 11 Feb 2009
Last Updated on STN: 11 Feb 2009

L4 ANSWER 18 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
2009:79244 BIOSIS
PREV200900079244

TI Rat heart cannot synthesize docosahexaenoic acid from circulating alpha-linolenic acid because it lacks elongase-2.

AU Igarashi, Miki [Reprint Author]; Ma, Kaizong; Chang, Lisa; Bell, Jane M.; Rapoport, Stanley I.

CS NIA, Brain Physiol and Metab Sec, Natl Inst Hlth, Bethesda, MD 20892 USA
miki@mail.nih.gov

SO Journal of Lipid Research, (AUG 2008) Vol. 49, No. 8, pp. 1735-1745.
CODEN: JLPRAW. ISSN: 0022-2275.

DT Article

LA English

ED Entered STN: 22 Jan 2009
Last Updated on STN: 22 Jan 2009

L4 ANSWER 19 OF 85 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
2008:696548 BIOSIS
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